REMARKS

In the Office Action dated September 22, 2008, claims 1-20 are pending and claims 1-20 stand rejected. Reconsideration is requested at least for the reasons discussed hereinbelow.

The present invention, as set forth in claim 1, provides:

> [a]n image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit **on a sheet having one or a plurality of memories**, comprising:
>
> an encryption key creating unit for creating an encryption key when said acquisition unit acquires an image signal;
>
> an encrypting unit for encrypting the image signal with the encryption key created by said encryption key creating unit; and
>
> a writing unit for writing the encryption key into the memory **on said sheet having one or a plurality of memories**,
>
> wherein said image forming unit **forms an image** based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**.

Claims 1-20 are rejected under 35 U.S.C. §103(a) over Imai (US 5,512,977) in view of Monroe et al. (US 5,268,963: "Monroe"). Imai has been discussed in detail in previous communications. The Examiner admits at least that Imai does not disclose a sheet having one or a plurality of memories. More specifically, Imai ***fails*** to teach or suggest a sheet, on which the encrypted image is formed, the sheet having one or a plurality of memories **in which the encryption key is written**. Thus, Imai ***fails*** to teach or suggest, for example, at least the following elements of claim 1:

> i. an image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit **on a sheet having one or a plurality of memories**;
>
> ii. a writing unit for **writing the encryption key into** the memory **on said sheet having one or a plurality of memories**;
>
> iii. said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**; **and**

iv. wherein said image forming unit **forms an image** based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories..**

Although Imai describes an encryption key stored in a memory, there is not even a hint of a suggestion that the memory for storage of the encryption key be contained in the sheet bearing the encrypted image.

To make up for the deficiencies of Imai, the Examiner cites Monroe for disclosing "a device for encoding personalized identification for storage on memory device, which further discloses a sheet (card) having one or a plurality of memories (column 3, lines 52-68 and figure 2)."

However, Monroe ***fails*** to make up for the deficiencies of Imai. As discussed at the cited portion, Monroe discloses a "smart card," which "comprises a plate 32 including a magnetic stripe 34 for magnetically storing data and an integrated circuit," which comprises an EEPROM memory chip with a microprocessor." The card serves as "a memory storage device for storing fake-proof video information data for later retrieval." There is not even a hint of a suggestion for storing an encryption key in the card. Thus, there is even less of any suggestion to store an encryption key on a sheet containing the encrypted image, as claimed herein.

Monroe ***fails*** to teach or suggest at least the following:

(i) an encryption key creating unit for creating an encryption key when said acquisition unit acquires an image signal;

(ii) an encrypting unit for encrypting the image signal with the encryption key created by said encryption key creating unit;

(iii) a writing unit for **writing the encryption key** into the memory **on said sheet having one or a plurality of memories;** and

(iv) said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories.**

Because Imai also fails to teach or suggest items (i) - (iv), it is not seen how the combination of Monroe with Imai would have made the present invention obvious to one of ordinary skill in the art.

Further, in accord with the image forming apparatus of the present invention, as set forth in claim 12, an image reading unit reads an image formed on a sheet, a memory reading unit reads an encryption key from a memory formed on the sheet when the image reading unit reads the image, a decrypting unit decrypts an image signal of the image read by the image reading unit, with the encryption key read by the memory reading unit, and the image based on the image signal decrypted by the decrypting unit is recorded on another sheet.

On the other hand, Monroe discloses a card provided with a magnetic stripe, in which data is magnetically stored, and with an integrated circuit having an EEPROM memory. Applicant respectfully submits that a "sheet" of paper for forming an encrypted image and a magnetic memory "card" for storing fake-proof information data are substantially different form each other. As stated, the card discussed in Monroe is a smart card for storing fake-proof video information for later retrieval. Monroe does not disclose or suggest writing or storing an encryption key into a memory on a sheet, as set forth, e.g., in claims 1 or 12 of the present application. Nor does Monroe disclose or suggest that an image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**, as set forth in claim 1 of the present application.

Also, the feature of Imai lies in that information and a first code indicating a range to be encrypted in a first medium (sheet) are encrypted with a predetermined encryption key, and the encrypted information is printed on a second medium (sheet), together with a second code indicating the range of the encrypted information. Imai does not disclose or suggest "writing an encryption key into a memory on a sheet" of claim 1.

Thus, it is not seen how one of ordinary skill in the art would have combined Imai and Monroe to achieve the presently claimed invention. There is no teaching or suggestion in either Imai or Monroe, or their combination to write an encryption key into memory on a sheet having an encrypted image signal.

The examiner now argues reliance on Monroe (column 1, lines 50-60; column 2, lines 25-35; column 4, lines 32-40) to disclose:

> i. an image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit on a sheet having one or a plurality of memories:
>
> ii. a writing unit for writing the encryption key into the memory on said sheet having one or a plurality of memories; and
>
> iii. said image forming unit forms an image based on the image signal encrypted by said encrypting unit on said sheet having one or a plurality of memories.

Applicant strongly disagrees.

Regarding

column 1, lines 50-60

Here, Monroe discloses encoding fake-proof video information data for storage on a user identification card. As stated, the method comprises acquiring personal video information, digitizing the acquired information for storage in card memory, generating system verification information . . ..

However, nowhere is it disclosed or suggested, for example, that an image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**, as set forth in claim 1 of the present application.

column 2, lines 25-35

Here, Monroe discloses that the user identification card has memory means, and that the system has means for acquiring personal video information for a user of the card, means for digitizing the video information for storage in the card memory, means for generating a system verification . . ..

However, nowhere is it disclosed or suggested, for example, that an image forming unit forms an image based on the image signal encrypted by said encrypting unit

on said sheet having one or a plurality of memories, as set forth in claim 1 of the present application.

column 4, lines 32-40

Here, Monroe discloses that the digitizer and compression board (48) is used to acquire image data from the camera 20 or biometrics device 24 and digitizing and compressing the image data for transfer to CPU 40.

Again, nowhere is it disclosed or suggested, for example, that an image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**, as set forth in claim 1 of the present application.

The examiner also alleges that Monroe discloses writing an encryption key into memory on a sheet (column 1, lines 50-60). Applicant has carefully studied the text relied upon by the examiner. Nowhere is an encryption key even suggested. Much less is it suggested to write an encryption key into memory on a sheet having an image based on the encrypted image signal.

The examiner also alleges that Imai discloses writing an encryption key into memory on a sheet (column 3, lines 22-33). Applicant has carefully studied the text relied upon by the examiner. Here, Imai discloses that a copying machine with an encryption function comprises a first memory and that the encryption key is stored in such first memory, and that the deciphering means deciphers the information read by the information reading means utilizing as a decryption key the encryption key stored in the first memory. Nowhere does Imai disclose or suggest that the first memory is located on a **sheet having one or a plurality of memories**, or that an image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**, as set forth in claim 1 of the present application.

The examiner further alleges that Applicant is arguing the references separately and not in combination. Applicant strongly disagrees. Applicant has pointed out that each of Imai and Monroe lack teachings or suggestions of the same elements set forth in the current claims. As

such, Applicant submits that it is not possible for any combination of Imai and Monroe to have made the claimed invention obvious to one of ordinary skill in the art.

Regarding claim 2, Imai ***fails*** to teach or suggest, for example, at least the following additional elements:

> (i) an image reading unit for reading the image formed on said **sheet having one or a plurality of memories;**
>
> (ii) a memory reading unit for reading the **encryption key** from the memory **when** said image reading unit reads the image; and
>
> (iii) a decrypting unit for decrypting the image signal of the image read by said image reading unit, **with the encryption key** read by said memory reading unit.

Monroe also ***fails*** to teach or suggest, for example, at least the following additional elements:

> (i) a memory reading unit for reading the **encryption key** from the memory **when** said image reading unit reads the image; and
>
> (ii) a decrypting unit for decrypting the image signal of the image read by said image reading unit, **with the encryption key** read by said memory reading unit.

Thus, it is not seen how one of ordinary skill in the art would have combined Imai and Monroe to achieve the presently claimed invention. There is no teaching or suggestion in either Imai or Monroe, or their combination to write an **encryption key** into memory on a sheet having an encrypted image signal, to read the **encryption key** from the memory **when** said image reading unit reads the image, or to decrypt the image signal of the image read by said image reading unit, **with the encryption key** read by said memory reading unit.

Regarding claim 3, neither Imai, nor Monroe, nor their combination teach or suggest an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key. Nor do they teach or suggest that a writing unit writes the encryption key and the information acquired or created by said information acquiring/creating

unit into the same memory, or different memories on said sheet having one or a plurality of memories. Imai merely stores encrypted information in the copying machine. There is not even a hint of a suggestion for acquiring or creating information about an image encrypted with an encryption key. Monroe is totally silent regarding this subject. Thus, it is not seen how one of ordinary skill in the art would have combined Imai and Monroe to achieve the presently claimed invention.

The remaining claims are also patentable for at least the same reasons as discussed above.

Claims 5-11 and 14-20 are rejected under 35 U.S.C. §103(a) over Imai and Monroe in view of Harrada et al. (US 20030007640; "Harrada"). Applicants strongly disagree. Imai and Monroe are discussed above. Harrada *fails* to make up for the deficiencies in Imai and Monroe. Harrada also fails to teach or suggest, for example:

> an image forming apparatus having, for example, a writing unit for **writing the encryption key** into the memory **on said sheet having one or a plurality of memories**, wherein said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories,**
>
> an image reading unit for reading the image formed on said sheet having one or a plurality of memories and a memory reading unit for reading the **encryption key** from the memory **when** said image reading unit reads the image,
>
> an **information acquiring/creating unit** for acquiring or creating information **about the image encrypted** with the encryption key, wherein said writing unit writes the **encryption key and the information acquired or created** by said information acquiring/creating unit into the same memory, or different memories **on** said sheet having one or a plurality of memories, or
>
> a memory reading unit that reads the **encryption key and information** about the image encrypted with the encryption key from the same memory, or different memories **on said sheet** having one or a plurality of memories, when said image reading unit reads the image,

as claimed herein.

Further with respect to claims 7 and 16, neither Imai, nor Monroe, nor Harrada, nor their combination teach or suggest that the image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a region where the image is formed. The Examiner states only that Imai, Monroe and Harrada disclose an apparatus capable of prohibiting illegal copying, and Imai discloses a control circuit that accepts input data from keyboard and displays necessary data. It is not seen where the cited combination discloses that the image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a region where the image is formed, as claimed herein.

The examiner alleges that Harrada discloses that image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a region where the image is formed (apparently because "the condition storage unit shows a permitted playback number of time;" paragraph [0024], [0214]-[240]). Applicant strongly disagrees.

Harrada discloses that the content storage unit prestores a usage condition such as the number of playback times. Harrada also discloses that the usage condition storage unit and the content storage unit are elements of the record/playback device. Nowhere in Harrada is there even a hint of a suggestion that information read by the image reading unit, from a sheet having one or a plurality of memories, the encryption key and an image based on the image signal encrypted by said encrypting unit includes the number of times the image based on the decrypted signal of the read image was formed ***and*** the image forming unit forms the number in a visually inconspicuous form within a region where the image is formed. Instead, Harrada merely discloses that it **stores** the number of **permitted** playback times. Thus, at least the information stored is different from that claimed, and the claimed display is not is not suggested. Clearly, Imai and Monroe are silent on these claimed elements.

Further with respect to claims 10 and 19, it is not seen where the combination of Imai, Monroe and Harrada disclose an apparatus wherein the information read by said memory reading unit includes one or a plurality of **identifiers of image forming apparatus**, as claimed

herein. There is not even a hint of a suggestion for storing an identifier of the image forming unit in the cited prior art combination.

The examiner alleges that such identifiers are disclosed by Harrada (paragraph [0025]). However, here, Harrada merely discloses various usage conditions are "a permitted number of playback times, a permitted playback period, or a permitted total playback time, or a permitted number of times for moving content. Nowhere does Harrada even hint at storing an identifier of image forming apparatus that may be used for forming images from the sheet and that such identifier is stored in a memory on the sheet, as is claimed herein.

Also, with respect to claims 11 and 20, it is not seen where the combination of Imai, Monroe and Harrada disclose an apparatus wherein the memory reading unit includes a code and an input code is compared with the code in memory to determine whether to decrypt the image signal. The Examiner refers to permissive conditions set forth in Harrada for making the decrypted image, however, those conditions fail to include a code. They merely refer to permissive numbers of copies or permissive periods for making copies and the like.

Thus, it is not seen how the presently claimed invention would have been obvious to one of ordinary skill in the art in view of any combination of Imai, Monroe and Harrada.

In view of the discussion above , Applicant respectfully submits that the pending application is in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105**.

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Respectfully submitted,

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